

## Screenshots of output for every test case

### 1. Test case 1: Deadlock

```
run:
Test case: Deadlock/TestCase01.txt

A DeadLock is detected.
The program find this cycle: P0 -> R49 -> P9 -> R12 -> P8 -> R3 -> P0
BUILD SUCCESSFUL (total time: 0 seconds)
```

### 2. Test case 2: Deadlock

```
run:
Test case: Deadlock/TestCase02.txt

A DeadLock is detected.
The program find this cycle: R4 -> P2 -> R2 -> P1 -> R4
BUILD SUCCESSFUL (total time: 0 seconds)
```

### 3. Test case 3: Deadlock

```
run:
Test case: Deadlock/TestCase03.txt

A DeadLock is detected.
The program find this cycle: P0 -> R0 -> P2 -> R1 -> P0
BUILD SUCCESSFUL (total time: 0 seconds)
```

### 4. Test case 4: Deadlock

```
run:
Test case: Deadlock/TestCase04.txt

A DeadLock is detected.
The program find this cycle: R2 -> P2 -> R3 -> P1 -> R2
BUILD SUCCESSFUL (total time: 0 seconds)
```

### 5. Test case 5: NoDeadlock

```
run:
Test case: NoDeadlock/TestCase05.txt

No deadlock is detected.
The program find 0 cycle.
BUILD SUCCESSFUL (total time: 0 seconds)
```

6. Test case 6: NoDeadlock

```
run:
Test case: NoDeadlock/TestCase06.txt

No deadlock is detected.
The program find 0 cycle.
BUILD SUCCESSFUL (total time: 0 seconds)
```

7. Test case 7: Deadlock

```
run:
Test case: Deadlock/TestCase07.txt

A DeadLock is detected.
The program find this cycle: R2 -> P9 -> R1 -> P1 -> R4 -> P3 -> R0 -> P2 -> R2
BUILD SUCCESSFUL (total time: 0 seconds)
```

8. Test case 8: Deadlock

```
run:
Test case: Deadlock/TestCase08.txt

A DeadLock is detected.
The program find this cycle: P0 -> R8 -> P4 -> R9 -> P0
BUILD SUCCESSFUL (total time: 0 seconds)
```

9. Test case 9: Deadlock

```
run:
Test case: Deadlock/TestCase09.txt

A DeadLock is detected.
The program find this cycle: R2 -> P6 -> R1 -> P2 -> R5 -> P9 -> R2
BUILD SUCCESSFUL (total time: 0 seconds)
```

10. Test case 10: Deadlock

```
run:
Test case: Deadlock/TestCase10.txt

A DeadLock is detected.
The program find this cycle: P2 -> R12 -> P7 -> R14 -> P2
BUILD SUCCESSFUL (total time: 0 seconds)
```

11. Test case 11: Deadlock

```
run:
Test case: Deadlock/TestCase11.txt

A DeadLock is detected.
The program find this cycle: P0 -> R7 -> P8 -> R1 -> P0
BUILD SUCCESSFUL (total time: 0 seconds)
```

12. Test case 12: Deadlock

```
run:
Test case: Deadlock/TestCase12.txt

A DeadLock is detected.
The program find this cycle: P8 -> R2 -> P3 -> R0 -> P8
BUILD SUCCESSFUL (total time: 0 seconds)
```

13. Test case 13: Deadlock

```
run:
Test case: Deadlock/TestCase13.txt

A DeadLock is detected.
The program find this cycle: R3 -> P1 -> R24 -> P3 -> R3
BUILD SUCCESSFUL (total time: 0 seconds)
```

14. Test case 14: Deadlock

```
run:
Test case: Deadlock/TestCase14.txt

A DeadLock is detected.
The program find this cycle: R7 -> P5 -> R9 -> P6 -> R10 -> P1 -> R7
BUILD SUCCESSFUL (total time: 0 seconds)
```

15. Test case 15: NoDeadlock

```
run:
Test case: NoDeadlock/TestCase15.txt

No deadlock is detected.
The program find 0 cycle.
BUILD SUCCESSFUL (total time: 0 seconds)
```

16. Test case 16: NoDeadlock

```
run:
Test case: NoDeadlock/TestCase16.txt

No deadlock is detected.
The program find 0 cycle.
BUILD SUCCESSFUL (total time: 20 seconds)
```

17. Test case 17: NoDeadlock

```
run:
Test case: NoDeadlock/TestCase17.txt

No deadlock is detected.
The program find 0 cycle.
BUILD SUCCESSFUL (total time: 23 seconds)
```

18. Test case 18: Deadlock

```
run:
Test case: Deadlock/TestCase18.txt

A DeadLock is detected.
The program find this cycle: P0 -> R0 -> P5 -> R8 -> P0
BUILD SUCCESSFUL (total time: 0 seconds)
```